Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A method of operating a liquid feed fuel cell, comprising adding a quantity of perfluorooctanesulfonic acid to a fuel of the fuel cell.

2. (Original) The method of claim 1, wherein said perfluorooctanesulfonic acid is provided with a concentration of at least 0.0001 M.

3. (Original) The method of claim 2, wherein said perfluorooctanesulfonic acid is in the range of 0.0001 M to 0.01 Molar.

4. - 7. (Cancelled)

8. (Previously presented) An aqueous organic fuel-feed fuel cell fuel, comprising:

a first electrode having a first polarity and a surface which is formed with particles having a surface area greater than 200 m^2/g, said particles formed of alloys including at least two different kinds of metals;

a second electrode having a second polarity different than the first polarity;

an electrolyte, comprising a proton-conducting membrane which is coupled to both said first and second electrodes; and

a circulating system, operating to circulate a first liquid organic fuel which is substantially free of acid-containing electrolytes into an area of said first electrode to cause a potential difference between said first and second electrodes when a second component is in an area of said second electrode;

wherein said first electrode is formed of a porous material configured in a way to be wet by the organic fuel.

9. (Original) A fuel cell as in claim 8, wherein one of said metals of said alloy is platinum.

10. (Original) A fuel cell as in claim 9, wherein said alloy is formed of platinum-ruthenium, with a composition varying from 5 to 90 atom % of platinum.

11. (Original) A fuel cell as in claim 10, wherein said alloy particles are unsupported.

12. (Previously presented) A fuel cell as in claim 8 further comprising a carbon material for supporting said alloy particles.

13. (Currently amended) An organic fuel cell, comprising:

a first chamber;

an anode electrode, formed in said first chamber, and including a first surface exposed to said first chamber, at least said first surface including an electrocatalyst and a wetting agent thereon;

an organic fuel, wherein said fuel is an aqueous methanol derivative which is free of acid component;

an electrolyte, operatively associated with said anode electrode in a way to allow proton-containing materials to pass from said anode into said electrolyte, said electrolyte comprising a proton conducting membrane; and

a cathode electrode, operatively associated with said electrolyte, and having a second operative surface.

14. (Original) A fuel cell as in claim 13, wherein said second operative surface of said cathode electrode includes particles of electrocatalyst material thereon.

15. (Original) A fuel cell as in claim 14, wherein said electrocatalyst materials are materials optimized for electro-oxidation of a desired organic fuel.

16. (Currently amended) A fuel cell as in claim 15, wherein ~~said fuel is an aqueous methanol derivative which is free of acid component and~~ said electrocatalyst is platinum-ruthenium.

17. (Original) A fuel cell as in claim 14, wherein said particles of electrocatalyst on said cathode are optimized for gas diffusion.

18. (Currently Amended) A fuel cell as in claim 17, wherein said particles include an electrocatalyst alloy mixed with a ~~fluropolymeric~~ polytetrafluoroethylene additive.

19. (Original) A fuel cell as in claim 17, wherein said particles include an electrocatalyst mixed with said wetting agent which is an additive to promote hydrophobicity.

20. (Original) A fuel cell as in claim 14, further comprising a pumping element operating to circulate said organic fuel past said anode electrode.

21. – 26. (Cancelled)

27. (Previously presented) A method of forming an anode with an ionomeric additive, comprising:

preparing an electrode structure having particles with a surface area greater than 200 m^2/g;

impregnating the electrode structure with an electrocatalyst and binding said electrocatalyst thereto;

immersing the electrocatalyst-impregnated particles on said electrode structure into a solution containing an ionomeric additive;

removing said electrode structure from said solution, and drying said electrode structure; and

repeating said impregnating, removing and drying step until a desired composition electrode structure is obtained.

28. (Original) A method as in claim 27, wherein said electrocatalyst is bound in a polytetraflouroethylene binder.

29. (Currently amended) A method as in claim 27, wherein said ionomeric additive is ~~a fluropolymer~~ perfluorosulfonic acid.

30. (Original) A method as in claim 27, wherein said impregnating comprises mixing electrocatalyst particles with a binder and applying said binder/electrocatalyst onto a backing to form a thin layer of greater than substantially 200 meters squared per gram.

31. – 32. (Cancelled)

33. (Currently amended) An aqueous fuel cell, comprising:

a first electrode operating as an anode, said first electrode being effective to catalyze an oxidation reaction of a non-acidic component, and wherein said first electrode includes a hydrophilic proton conducting additive;

a second electrode, operating as a cathode to undergo a reduction reaction of a non-acidic component;

a circulating system, operating to circulate a first organic fuel in an area of said anode; and

an electrolyte, comprising a proton conducting membrane ionically coupled with both said first and second electrodes, to ~~passions~~ pass ions therebetween.

34. – 35. (Cancelled)

36. (Previously presented) An organic fuel cell, comprising:

a first chamber;

an anode electrode, formed in said first chamber, to have a surface exposed to said first chamber, at least said surface including particles of a material thereon which catalyzes said anode to react with non-acid containing organic fuels, and wherein said anode includes a hydrophilic proton conducting additive;

an electrolyte operatively associated with said anode in a way to allow proton-containing materials to pass from said anode into said electrolyte, said electrolyte comprising a hydrogen ion conducting membrane; and

a cathode electrode, operatively associated with said membrane, to receive said ions from said membrane and to react with a specified material.

37. (Currently amended) A method ~~as in claim 7,~~ of operating a fuel cell, comprising:

preparing a first electrode to operate as a first polarity electrode, said first electrode having a first surface exposed to the fuel;

circulating an organic fuel into contact with said first surface of said first electrode, said organic fuel having a component which is capable of electro-oxidation, wherein said organic fuel is substantially free of any acid component, and wherein said organic component includes water and a methanol derivative ~~is dimethoxymethane mixed with water to a concentration of about .1 to 2 M~~ selected from the group consisting of dimethoxymethane, trimethoxymethane, trioxane and combinations thereof;

preparing a second electrode which operates as a second polarity electrode, said second polarity being different than the first polarity, said second electrode having a second surface;

preparing an electrolyte which includes a proton conducting membrane;

circulating a second reactive component into contact with said second surface of said second electrode, said second reactive component including a component capable of electro-reduction; and

coupling an electrical load between said first electrode and said second electrode, to receive a flow of electrons caused by a potential difference between said first and second electrodes.

38. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative includes dimethoxymethane, forming an electro chemical reaction of

$$(CH_3O)_2CH_2 + 4H_2O \rightarrow CO_2 + 16H^+ + 16e^-.$$

39. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative is ~~trimethoxymethane~~ dimethoxymethane mixed with water to a concentration of about .1 to 2 M.

40. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative includes trimethoxymethane, forming an electro chemical reaction of

$$(CH_3O)_3CH + 5H_2O \rightarrow 4CO_2 + 20H^+ + 20e^-.$$

41. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative is ~~trioxane~~ trimethoxymethane mixed with water to a concentration of about .1 to 2 M.

42. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative includes trioxane, forming an electro chemical reaction of

$$(CH_2O)_3 + 6H_2O \rightarrow 3CO_2 + 12H^+ + 12e^-.$$

43. (Currently amended) A method as in claim 37 ~~7~~, wherein said methanol derivative is ~~dimethoxymethane~~ trioxane mixed with water to a concentration of about .1 to 2 M.

44. – 51. (Cancelled)